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Dear Dr. Watkins,

I have reviewed the methods and results in the Florida Department of Health report entitled "Acreage SIR Recalculation Population Estimate Methods and Results". In the report, the authors describe 3 methods of estimating population in the acreage area for the period of 2001 to 2007. The new population estimates were then used to recalculate three-year standardized incidence ratios (SIRs) for the 0-19 year age group for all cancers, brain cancer, and brain/CNS cancers.

Estimating population changes over a 7 year period for an area that may have been impacted by large immigration or emigration is inherently difficult, particularly when the estimates must be divided into smaller groups by age and gender. The source of information differs for each of the three methods described and each method of estimation relies on certain assumptions, the validity of which cannot be verified. These assumptions, however, have a logical basis and appear reasonable. Methods 2 and 3 result in similar estimates for the overall population and for the age/gender subcategories.

The overall purpose of the population estimation methods is to recalculate SIRs for the period 2002-2004 and 2005-2007 for the cancer categories using the estimated population as denominators. Although the SIRs were reduced slightly in comparison to the original method, brain cancer for female pediatric residents for the period 2005-2007 continued to be significantly elevated with 3 cases observed and less than one case (0.5 to 0.6) expected for that period.

The Florida Department of Health has pursued three methods to estimate the acreage area population for the years 2001 to 2007. Each of the methods is reasonable and the methodology appears sound. The main conclusion is that, even with denominator population ranging from 29,036 to 39,809, depending on the method, the SIR for female pediatric residents for brain cancer remains statistically, significantly elevated.

I realize that FDOH and Palm Beach County continue to work with the community and impacted families on this important issue. Please do not hesitate to contact me if we can offer any further assistance.

Sincerely yours,

Michael A. McGeehin, PhD, MSPH  
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